Advanced Practice Experience in  

*Primary/Ambulatory Care 3*  

Auburn University School of Pharmacy

Course Number: PYPP 5660  
Course Title: Primary/Ambulatory Care 3  
Credit Hours: 3 Semester Hours  
Prerequisites: 04PY Standing  
Corequisite:

Course Description: Advanced practice experience in an primary/ambulatory care setting that is innovative and/or the pharmacist has a special role.

Background: Relation to Pharmaceutical Care. This rotation provides the Pharm.D. student with experience in establishing caring relationships with patients in an acute medical care and/or ambulatory clinic setting that is different than that encountered during Primary/Ambulatory Care I and II. As the student identifies actual and potential patient-specific drug-related problems he/she will collaborate with primary care physicians and other members of the health care team to resolve and/or prevent them.

Practice Description: This practice experience will occur at a primary/ambulatory care setting different than that encountered during Primary/Ambulatory Care I and II.

Outcomes and Goals:

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<tr>
<th>Programmatic Outcome</th>
<th>Course Objectives</th>
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| 1. Communication Abilities - The student shall read, write, speak, listen, and use media to communicate. | A. Effectively communicate, verbally and in writing (e.g., consultations progress notes, drug information responses and other documents), with other health care professionals (pharmacists, physicians, nurses, etc.) about therapeutic plans, other patient care needs, and health care issues.  
B. Articulate and defend rationale and conclusions regarding drug therapy.  
C. Write patient care notes/documents that:  
  i. Are accurate, logical, yet only pertinent information  
  ii. Provide complete drug therapy directions (dosage, route, frequency, duration, monitoring parameters, and time of follow up)  
  iii. Use correct terminology, spelling, and grammar.  
D. Effectively communicate patient and/or medication self-management information to patients and health professionals.  
E. Deliver appropriate and effective patient counseling skills.  
F. Formulate and deliver programs for health care consumers that center on disease prevention and wellness promotion (i.e., smoking cessation, exercise, nutrition, immunizations, weight reduction).  
G. Prepare and present an educational program to a group of health care professionals or patients in an effective manner. |
2. **Thinking Abilities -** The student shall acquire, comprehend, apply, synthesize, and evaluate information. The student shall integrate these abilities to identify, resolve, and prevent problems and make appropriate decisions.

| A. | Provide concise, applicable, and timely responses to requests for drug information from health care professionals and patients. Specifically, the student shall:  
  i. Perceive, assess, and evaluate drug information needs.  
  ii. Apply a systematic approach to solve drug information questions.  
  iii. Demonstrate efficient literature search strategies.  
  iv. Select and use the most appropriate references and cite only pertinent references.  
  v. Interpret and synthesize information from multiple sources into a concise written or verbal presentation.  
 B. | Compare and contrast new information that is encountered during daily rotation activities with prior knowledge in order to assess its value and refine one's personal understanding.  
 C. | Critically analyze and evaluate biomedical literature and use evidence to optimize patient care. |

3. **Professional Ethics and Identity -** The student shall behave ethically. The student shall accept the responsibilities embodied in the principles of pharmaceutical care.

| A. | Make appropriate ethical and legal decisions.  
 B. | Accept responsibility and provide patient-centered care.  
 C. | Maintain excellence in personal practice.  
 D. | Exhibit a professional demeanor.  
 E. | Conduct direct patient care activities using a consistent approach that reflects the philosophy of primary care as well as pharmacy practice. |

4. **Social Interaction, Citizenship, and Leadership -** The student shall demonstrate appropriate interpersonal and intergroup behaviors.

| A. | Display appropriate interpersonal behaviors.  
 B. | Display appropriate team behaviors. |

5. **Self-Learning Abilities -** The student shall assess continuously his/her learning needs and develop the ability to respond appropriately.

| A. | Display independent self-learning:  
  i. Self-assess pharmacotherapy/practice responsibilities and develop improved approaches to pharmacotherapy and other aspects of practice.  
  ii. Recognize self-limitations (e.g., prejudices, assumptions, bias).  
  iii. Assess one's own abilities independently.  
  iv. Consider strengths and weaknesses when developing a personal learning plan.  
  v. Implement and successfully complete personal learning plans.  
  vi. Respond appropriately to constructive feedback.  
  vii. Identify areas for new practice opportunities and/or new professional roles and use self-directed learning skills to initiate or implement them. |

6. **Patient Assessment -** The student shall contribute to the database of information about the patient by: a) performing a medication history, review of systems, and physical assessment, b) requesting laboratory tests, and c) assessing medical, socio-behavioral and economic status.

| A. | Perform an accurate and effective medication history/patient interview.  
 B. | Perform an accurate and effective sociobehavioral assessment.  
 C. | Perform relevant and accurate physical assessment procedures.  
 D. | Develop functional patient databases by gathering and generating relevant information. |

7. **Drug Therapy Assessment –** The student shall assess the appropriateness of patient's drug therapy, including consideration of the chemical, pharmaceutical, pharmacokinetic, and pharmacological characteristics of the administered medications.

| A. | Assess each acute and chronic medical problem.  
 B. | Identify the following drug-related problems:  
  i. Drug therapy is needed for untreated indications.  
  ii. Patient is receiving a drug that has no indication and/or there is therapeutic duplication.  
  iii. There is a better choice of drug based on patient/disease characteristics, formulary, cost, etc.  
  iv. Drug therapy needs optimization (population and patient-specific pharmacokinetic and pharmacodynamic data indicate a drug regimen is not optimized).  
  v. Medication nonadherence.  
  vi. Drug induced disease/medical conditions.  
  vii. Socio-behavioral and economic barriers to effective drug therapy.  
  viii. Adverse drug reactions that are substantiated by laboratory, test, and physical findings.  
  ix. Routes of administration that are not the best, safest, and most cost-effective.  
  x. Drug interactions that are substantiated with pharmacokinetic/dynamic and compatibility information.  
 C. | Identify and evaluate each drug-related problem.  
 D. | Prioritize drug-related problem list. |

8. **Develop, Implement, and Monitor Drug Therapy Plans –** The student shall develop a therapeutic plan for the patient, which includes appropriate monitoring to address any problem identified.

| A. | Establish desired therapeutic outcomes.  
 B. | Consider drug and non-drug therapy alternatives.  
 C. | Develop drug therapy plans that are patient-specific, comprehensive, logical, practical, consider current evidence-based medicine recommendations, include strategies for prevention, and include patient education.  
 D. | Establish a plan for therapeutic drug monitoring that includes accurate documentation of population and patient-specific parameters, dosing history/administration times, monitoring parameters, and daily SOAP notes/plans.  
 E. | Develop and implement the pharmacotherapeutic plan promptly, efficiently, accurately, and effectively.  
 F. | Use an effective patient monitoring system (monitoring forms).  
 G. | Monitor the patient and follow up at appropriate intervals.  
 H. | Revise drug therapy plans on an ongoing basis.  
 I. | Ensure continuity of pharmaceutical care to and from the acute and ambulatory care patient care settings. |

9. **Pharmacotherapy Decision-**

| A. | Pursue the role of drug therapy practitioner over that of drug therapy advisor. |
### Making - The student shall demonstrate the ability to make pharmacotherapy decisions.

(Pharmacotherapy decisions determine what, why, where, and how drug therapy is provided. The making of pharmacotherapy decisions is the foremost expressions of the professional knowledge, responsibility, and authority of pharmacists.) The intent of a decision is to maximize the patient's response to drug therapy and prevent or resolve a drug-related problem(s) in order to endure positive outcomes.

#### B. Participate in pharmacotherapy decision-making by:

i. Identifying opportunities for decision-making.

ii. Proactively engaging decision-making opportunities.

iii. Formulating decision rationale that is the result of rigorous inquiry, scientific reasoning, and evidence.

iv. Pursuing the highest levels of decision-making.

v. Seeking **independence** in making decisions and **accepting** personal responsibility for the outcomes to patients resulting from one's decisions.

vi. Personally enacting decisions.

### 10. Medication Use Systems - The student shall specify, develop, use and evaluate acquisition, inventory control and distribution systems, while documenting and maintaining quality.

#### A. Work effectively within a medication use system (formulary, medication errors, ADR reporting.)

#### B. Utilize effective methods to monitor and evaluate the cost of drug therapy.

C. Schedule medications and laboratory testing so that they are congruent with patient care, facility procedures, and are feasible.

#### Typical Rotation Schedule 1:

<table>
<thead>
<tr>
<th>Times</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Weekends</th>
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<tbody>
<tr>
<td>7-8AM</td>
<td>Patient Review</td>
<td>Patient Review</td>
<td>Patient Review</td>
<td>Patient Review</td>
<td>Patient Review</td>
<td>Follow-up with patient problems</td>
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<tr>
<td>9-10AM</td>
<td>Patient Care</td>
<td>Patient Care</td>
<td>Patient Care</td>
<td>Patient Care</td>
<td>Patient Care</td>
<td>Patient Care</td>
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<tr>
<td>10-11AM</td>
<td>Follow Up</td>
<td>Follow Up</td>
<td>Follow Up</td>
<td>Follow Up</td>
<td>Follow Up</td>
<td>Follow Up</td>
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<tr>
<td>11-12 Noon</td>
<td>Case Conference</td>
<td>Open</td>
<td>Residences' Conference</td>
<td>Student Presentations</td>
<td>Family Practice Conference</td>
<td></td>
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<tr>
<td>12-1PM</td>
<td>Afternoon Clinic</td>
<td>Therapeutics Topic Discussion with Pharmacy Faculty</td>
<td>Open</td>
<td>Therapeutics Topic Discussion with Pharmacy Faculty</td>
<td>Afternoon Clinic</td>
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<tr>
<td>1-3PM</td>
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<td>2-5PM</td>
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#### Rotation Activities:

1. **Orientation to Family Practice Program** - During the first day of the rotation, the student will be oriented to the family practice program, clinic, and hospital if relevant. Pertinent policies and procedures will be reviewed. The student should:

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1 This schedule is typical of most rotations; however, there will be a schedule unique to each rotation. It will be provided in the rotation syllabus provided by each instructor.
a. Tour the pharmacy and meet staff. The instructor will explain the staff member's duties to the student and the student's responsibilities as a pharmacy student to the staff.

b. The student and instructor should discuss rotation specific policies and procedures. Specific discussion points should includes:
   1. Confidentiality
   2. Appropriate Dress
   3. Lines of Authority
   4. The student's schedule
   5. Available drug information resources

c. Learn about the instructor's practice philosophy regarding professional responsibilities and pharmaceutical care.

d. Learn how to access computer and library resources that have password security/limited access to the public.

2. Daily Responsibilities:

   a. Independently develop a patient database, assess drug therapy, and develop a pharmacotherapy plan for assigned patients that are encountered in clinic (and inpatient setting, if applicable).
      1. The instructor will observe patient assessment and medication history skills.
      2. The student is expected to prepare a SOAP note summarizing all findings.

   b. Provide answers to drug information questions that arise in during clinic. All drug information responses must be reviewed with the instructor before communication with other health care practitioners.
      1. Each of the drug information responses should be placed in the your learning portfolio.

   c. Give a formal Journal Article Presentation to an audience that will be selected by the instructor.
      1. A copy of the presentation and faculty evaluation forms should be placed in your learning portfolio.
      2. The instructor may assign additional literature analysis learning experiences as part of a weekly journal club.

   d. Give a formal Pharmacy Grand Rounds Patient Presentation to an audience that will be selected by the instructor.
      1. A copy of the presentation and faculty evaluation forms should be placed in your learning portfolio.
      2. The instructor will hold informal meetings to discuss patients on a daily basis.

   e. Document all patient care activities in your portfolio as outlined in the Advanced Practice

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2 These are typical responsibilities – more specific responsibilities will be provided in the instructor’s rotation syllabus.
Experience Manual.

1. The instructor will assess entries such as SOAP notes and interventions several times weekly and formally evaluate all entries at the end of the rotation.

f. The instructor may require completion of an independent self-directed project (e.g., preparation and delivery of a health consumer presentation, presentation to health professionals, paper).

g. Perform self-assessments by: corroborating midpoint and final rotation self-assessment ratings with those of the instructor, performing a self-assessment of each document placed in the learning portfolio, writing a reflective self-evaluation at the end of the rotation.

h. Demonstrate use of a core library of journals, reference books and databases that comprise your personal library.

Textbooks:
The student is expected to build a personal library that has text resources. The following list outlines topics of resources to be included in the personal library; the student is expected to select a specific text or reference that covers the stated topic:
- Pharmacotherapy Book/Reference
- General Drug Information Reference
- General Medicine Book/Reference
- Physical Assessment Book/Reference
- Laboratory Interpretation Book/Reference
- Pharmacokinetics Book/Reference
- Adverse Drug Reaction Book/Reference

The student is expected to be self-directed in obtaining drug literature pertinent to patient care issues. The student is expected to have Internet access in order to utilize University and Ovid Resources and conduct web searches. Some Medline databases such as Grateful Med are available free of charge from the National Library of Medicine.

Students are expected to check their email and have internet access on a daily basis.

Students must possess a beeper so that other health care professionals and the instructor can reach them within the hospital. The instructor may assign additional required/suggested readings based on conference topics and patient care issues.
Grading and Assessment Procedures

Course Requirements and Grading Criteria:

Performance Based on Instructor's Daily Observations 60%

- Patient Assessment(10%); Drug Therapy Assessment(10%); Develop, Implement and Monitor Drug Therapy Plans(15%); Communication Abilities(5%); Pharmacotherapy Decision-Making(5%); Thinking abilities(5%); Professional Ethics, Identity, and Behavior(5%); Social Interaction Citizenship and Leadership(S/U); Self-Learning Abilities(5%); Medication Use Systems (S/U)

- Midpoint Evaluation will be weighted 10% and the Final Evaluation will be weighted 50% of this section grade.

Written Assignments 20%

- Notebook/Portfolio: progress notes, patient education information, case presentations, learning log, personal goals, monitoring plans, recommendations made/outcomes, drug information questions/responses, patient monitoring forms, questions of residents, self-assessments, journal presentations, etc. (See Portfolio Assessment Form)

Other Assessments per Instructor (e.g., presentations, projects, participation in conferences) 20%

- If the instructor does not make assessments based on such assignments, the Performance based on Instructor's Daily Observations will be weighted 70% instead of 60%.

- Pharmacy Grand Rounds & Pharmacotherapy Clinical Trial Presentations if Performed During this Rotation.

Participation in all rotation activities S/U

- The student is required to spend a minimum of 40 hours per week at the rotation site. The student is expected to be prompt in attending all rotation activities.

- Unexcused absence from any rotation activities and late assignments will be deemed unsatisfactory and a failing grade may be submitted irrespective of other grades.

Grading Scale:

A = 90 - 100%
B = 80 - 89%
C = 70 - 79%
D = 60 - 69%
F < 60%

If the rotation grade is less than a C (<70%), the rotation must be repeated.

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3 The individual instructor may change the percent weight + 5% and reassign or take the 5% from another assessment category. This will be outlined in the syllabus specific to each rotation.
Assessment System:

This rotation is part of an abilities-based outcomes curriculum. The *Auburn University School of Pharmacy, Advanced Practice Experience Manual* provides specific details and policies about how students are assessed during rotations.

**Policies:**

Specific policies pertaining to all Advanced Practice Experience rotations are found in the *Auburn University School of Pharmacy, Advanced Practice Experience Manual*.

**Attendance:** Students are required to be at the rotation site a minimum of 40 hours/week. As a professional, the student is expected to stay beyond the usual work hours when patient care still needs to be completed.

**Special Needs:**

It is the policy of the Auburn University to provide accessibility to its programs and activities and reasonable accommodation for persons defined as having disabilities under Section 504 of the Rehabilitation Act of 1973, as amended, and the American with Disabilities Act of 1990.

Students should contact the Program for Students with Disabilities 1244 Haley Center, 334-844-2096 (Voice/TT) and must receive this approval before individual instructors grant any special circumstances.

Students with defined special needs should see the Director of Experiential Education at the beginning of the P4 Year so that accommodations can be scheduled. Students should also see the site instructor to make specific accommodation.